#### **REMARKS**

In the Office Action, the Examiner rejected all of the pending claims, including claims 1, 3-21, and 23-72. The Examiner also made the Office Action Final. All of the claims are believed to be in condition for allowance, and their reconsideration is respectfully requested.

## Request for Withdrawal of Finality

The Examiner made the outstanding Office Action Final. However, the Examiner cited a new reference combination and formulated a new rejection in this Office Action.

A former rejection had been removed by the Examiner on the grounds that argumentation in a previous response was found persuasive. *See*, Office Action, page 8.

In the "Conclusion" section of the Office Action found on page 8, however, the Examiner stated that "Applicant's [sic] amendment necessitated new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**." Applicants note, however, that no amendment was made in the previous response. Accordingly, there is no basis in the current PTO rules and practice for making the present Office Action Final.

Accordingly, Applicants respectfully request that the finality of the current Office Action be withdrawn, and that the claims either be allowed in their present form, or a subsequent non-final office action be issued.

### Claim Rejections Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1, 5-21, 25-48, 51-58 and 61-72 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,838,758 (hereinafter "Krug") in view of U.S. Patent No. 5,023,895 (hereinafter "McCroskey"). Applicants further note that the Application presently includes six

independent claims, namely claims 1, 21, 41, 48, 58, and 68. Accordingly, all of the independent claims stand rejected in view of Krug combined with McCroskey. Because this was the only rejection of these independent claims, the Krug and McCroskey combination will be discussed in greater details below.

All of the independent claims recite, in generally similar language, two salient features that are either absent from the Krug and McCroskey references, or that simply cannot be rendered obvious because the references are not susceptible to combination as proposed by the Examiner. These features include: (1) the use of a stationary radiation source and a stationary detector for computed tomography imaging; and (2) three-dimensional reconstruction of a computed tomography image.

## Krug fails to teach a stationary computed tomography scanner.

The Examiner relied upon Krug for teaching scanning of suspect articles for possible explosive contents. The Examiner specifically pointed out that Krug discloses the use of computed tomography scanning for such applications. While Krug does teach the use of computed tomography scanning, he does so in a very limited and specific manner. In fact, Krug actually teaches the use of dual energy projection X-ray imaging for initial screening. Those skilled in the art would readily recognize that such projection imaging is incapable of developing three-dimensional reconstruction views. However, Krug teaches that when certain suspect articles are located, the projection X-ray scanning may be supplemented with computed tomography scanning.

However, there is nothing whatsoever in Krug that would lead one skilled in the art to understand that the conventional computed tomography scanning system proposed is a stationary system. Indeed, the discussion in Krug of the computed tomography system would rather lead one to believe that it is nothing more than a conventional rotational system through which packages or articles would be inserted. The only teaching or representation of the computed tomography scanner contained in Krug can be found in Figures 18A and 18B. One skilled in the art would not recognize these as anything other than a conventional rotational scanning system. At the very least, the Examiner has not presented any evidentiary basis in Krug for demonstrating otherwise. Accordingly, the basis for rejection set forth by the Examiner is not supported by the reference.

Because Krug does not provide the teachings relied upon by the Examiner, the combination of the Krug and McCroskey teachings cannot support a *prima facie* case of obviousness as argued by the Examiner. On this basis alone, Applicants request reconsideration and withdrawal of the rejection.

# The teachings of Krug and McCroskey cannot be reasonably combined.

To establish a *prima facie* case of obviousness, the Examiner must set forth a reasonable basis for combining the references. In particular, it is incumbent upon the Examiner to state a reasonable motivational suggestion from the references for the modification or combination proposed. In the present case, the Examiner recognized that Krug fails to teach three-dimensional reconstruction of a computed tomography image, or of images made by such techniques and based upon data acquired from a computed tomography system. The Examiner relied upon McCroskey for teaching such three-dimensional image formulation.

McCroskey appears to teach an early version of a computed tomography scanning technique in which an article is rotated. It is uncertain, and indeed unlikely, that at the time McCroskey was written, the technique would have included anything similar to what would today be known as three-dimensional reconstruction. However, even allowing that McCroskey teaches something similar to three-

dimensional reconstruction (which, however, Applicants do not concede), it is clear that one skilled in the art upon reading Krug would not modify or combine Krug with the imaging technique of McCroskey.

The Examiner suggested that the combination would have been obvious to one of skill in the art at the time of the present invention "to allow for the detection of either explosives or objects within human bodies since the construction allows for the use of rapid reconstruction and detection of fine discontinuities or defects in critical portions of the scanned object." The Examiner relied upon passages from McCroskey in support of this motivation.

However, Krug specifically teaches that computed tomography techniques are still too slow for the type of inspection needed for detection of explosives and other contents (e.g., baggage screening). This is precisely the reason that Krug stresses that the computed tomography scanner *not* be used for initial or routine scanning. See, Krug, col. 32, lines 22-35 ("The CT scanner 1002 provides information relevant to the three-dimensional spatial configurations of objects within the baggage, for example, such as thicknesses of overlying materials, but takes a relatively long time to process each CT scan and so is not suitable to be solely responsible for detecting and indicating suspect specific materials on-line in real time." Emphasis added.)

Those skilled in the art, upon reading both Krug and McCroskey would not conclude, as does the Examiner, that three-dimensional reconstruction is more rapid than the conventional computed tomography scanning taught by Krug. On the contrary, it would be generally expected that such three-dimensional reconstruction would be *even more time consuming*, and in fact *impossible* given the conventional CT scanner taught by Krug. Indeed, the fact that McCroskey teaches the use of a cone beam for imaging small rotating objects, does not imply that a three-

dimensional reconstruction technique, as that term is currently understood in the art, would or could even be used in the time frames desired by Krug. That is, even the earlier McCroskey technique would not be understood by a person of ordinary skill in the art at the time of the invention to provide a sufficiently rapid scan to overcome the concerns and teachings of Krug.

In short, because the specific motivation proposed by the Examiner is not supported by the references, and in fact is contrary to the teachings of the principal reference, Krug, the Examiner has not established a reasonable basis for the combination. Accordingly, a *prima facie* case of obviousness has not been established.

### Patentability of dependent claims.

The claims dependent from the independent claims discussed above were rejected either based upon the combination of Krug and McCroskey or based upon additional references further in combination with these. However, all of the dependent claims are believed to be clearly allowable both due to their dependency from allowable base claims, as well as for the subject matter they separately recite. Accordingly, reconsideration and allowance of all the dependent claims are also requested.

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## **Conclusion**

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: July 17, 2006

Patrick S. Yoder Reg. No. 37,479 FLETCHER YODER P.O. Box 692289 Houston, TX 77269-2289 (281) 970-4545